files

From: mnorris@goldeneye.water.ca.gov
Date: 11 Feb 97
Subject: RE: Summary of meeting minutes 2-6-97 CALFED Storage/Conveya
nce Tech Team
mnorris@water.ca.gov

Summary of Meeting
CALFED Bay-Delta Program Storage/Conveyance Technical
Team
February 6, 1997

Key Discussion Items

Four comment letters were presented in a handout as suggestions for operational criteria.

The post-processing spreadsheet evaluation process was discussed. There are limitations in the spreadsheets such as the fact that dynamic Delta modeling is not done, there is no reservoir re-operation or a way to integrate operations of different facilities, and X2 is not recalculated. A handout on the post-processing spreadsheet was handed out.

Delta Conveyance and Storage Components can be put together in the form of draft alternative components. A draft report was handed out describing the alternative components.

Action Items

The comment letters could result in changes to the spreadsheets to accommodate new operational criteria.

The pulse flow issue will be reinvestigated and reanalyzed. A report is expected to be written.

All of the draft materials will be run through the Storage/Conveyance Technical Team and the Program Coordination Team before presentation at a Storage/Conveyance Public Workshop at the Sacramento Convention Center on March 20, 1997.

Delta Conveyance and Storage Components can be assembled like building blocks into draft

alternative components. Eight alternative components were presented for discussion. They will be further refined including the possibility that some may be eliminated before presentation at the March 20, 1997 public workshop.

Draft Meeting Notes
CALFED Bay-Delta Program Storage/Conveyance Technical Team
February 6, 1997 at 1:30 pm in room 1142 of the Resources Building

Attendance List:

Stein Buer, CALFED (chair)
Kathy Kelly, DWR
Waiman Yip, DWR
Bellory Fong, DWR
Victor Pacheco, CALFED
Michael Norris, CALFED (minutes)
Marco Bell, CALFED (minutes)
Ray McDowell, CALFED
Mark Cowin, CALFED
Tom Morstein-Marx, US Bureau of Reclamation
Liz Howard, US Bureau of Reclamation
John Johannis, US Bureau of Reclamation
George Barnes, DWR
Ron Ott, CALFED Consulting Team
Pete Chadwick, Fish and Game
Carolyn Yale, EPA
Susan Hatfield, EPA
Bruce Herbold, EPA
Bob Pine, USFWS (on conference telephone)
Jean Elder, USFWS (on conference telephone)

Stein convened the meeting and presented an agenda as follows:

- Introductions
- Review of Comment Letters
- Spreadsheet Evaluations
- Alternative Components

Kathy Kelly asked how stakeholder involvement is being handled and Stein said the work products would be presented to everyone at the Storage/Conveyance Public Workshop on March 20, 1997 at the Sacramento Convention Center after the products had been reviewed by the Storage/Conveyance Technical Team and the Program Coordination Team (PCT).

Stein then discussed the "Suggestions for Operational Criteria" comment letters from the EPA, Bay Institute, Dave Fullerton, and the Environmental Defense Fund. According to Stein, most comments could be transferred to some representation in the modeling efforts. At this time, the existing spreadsheets use a "fill and dump" approach which might not be very realistic in a series of drought years for example. A "carryover" factor is being incorporated into the spreadsheets. Also, there is concern that spring flows need to be augmented in the spreadsheet criteria.

Mark Cowin discussed the spreadsheets. According to Mark, dynamic Delta modeling is not done, there is no reservoir re-operation, and X2 is not recalculated. Bob Pine (on conference telephone) and Bruce Herbold wondered if criteria such as the operation of Los Vaqueros Reservoir or Delta Wetlands (if put on line) could be dealt with in the spreadsheets. Stein and Mark said they had not although neither felt any diversions from those facilities would markedly impact results and Stein didn't think that level of detail was needed at this time.

Mark said the spreadsheet is already a 15 MB file and is already pushing the limit for the things it does. The model will be available on the web page.

Mark reviewed the three-page handout on the spreadsheet evaluations. Refinements include:

- added carryover
- environmental supply in other reservoir

evaporation
groundwater was refined

Mark said we are limited on environmental demand by flows. One has to look at the water year types to see when environmental demand will be required.

There was discussion about whether navigation controls are appropriate to use as a limit in light of Anadromous Fish Restoration Program (AFRP) flows.

There was discussion about whether the 60,000 cfs flows were being met are where the figure came from. Ben Everett from CH2MHill worked on coming up with this flow amount. It was mentioned that the figure was also arrived after recommendations from Dick Daniel although the number was not set in concrete. There was discussion that the relationship to fluvial processes is not well defined. There was other discussion on the pulse flow issue such as the minimum of the ranges, the sensitivities of the parameters, and the relationship of pulse flows to rules. In general, the discussion from the group recommended that the pulse flow analysis and issue should be examined further and put together in the form of a report.

The AFRP flow issue was discussed. Bruce Herbold thought that perhaps AFRP minimum flows should be used in the spreadsheet rather than navigation flows. Liz Howard wondered what the difference would be between the two but that couldn't be answered at this time. The group discussed whether demand targets should include looking at other flow targets such as using the I Street bridge requirement as suggested by John Johannis.

Mark Cowin then reviewed the Urban/Ag uses where the environmental parameter is turned off to see what happens for the first go-around. Then, the final step is to combine the environmental, ag, and urban requirements to see what happens.

Mark said one more limitation in the spreadsheet is that there isn't a way to integrate operations of different facilities in the spreadsheet. According to Mark, we are looking at total water benefits and not accounting for specific water such as Coordinating Water Agreement (COA). Since we do not re-operate the system, the storages are not integrated to work together.

George Barnes reported that he is moving along with his model studies. The DWRSIM runs get their criteria from CALFED using the Bay-Delta Accord. George is currently working on interruptible supply and developing criteria for isolated facilities as well as introducing runs to include CALFED components. DWRSIM has had some difficulties in that COA and the Accord conflict with one another and it becomes difficult to predict where the system will break. Also, the coding for DWRSIM has been cumulative in that the model has been added onto over the years to do more and more things without someone taking a step back and seeing if a whole new model needs to be written. An analogy was made to an old worn out automobile.

Stein then presented eight draft alternative components including a Figure 1 and Figure 1A that were almost the same. The alternative components are assembled like building blocks from Delta Conveyance and Storage Components. According to Stein, the alternative components have the opportunity to digest a lot of the synergy from the comments received from the environmental community. Some of the draft alternative components will be presented at the March 20, 1997 Public Workshop. In addition to comments from the environmental sector, the water community has provided comments and are proceeding with modeling of their own.

Figures 1 And 1A minimize change in the Delta configuration and the only difference is an intake at

Hood in 1A above the discharge for the Sacramento Wastewater Treatment Plant.

Figures 2 and 3 emphasize habitat with Figure 3 selecting Tyler Island in particular for habitat creation. According to Stein, these two alternative components are in response to comments from the California Urban Water Agency (CUWA). The flood flows need to go from the Sacramento River to the San Joaquin so Bouldin Island is included in both alternative components.

Figure 4 is a "zebra mussel" type of alternative component in which the option of diverting from any one of multiple intakes is being emphasized in light of the fact that this approach is being recognized as the best way to deal with the potential invasion of zebra mussels in the Delta. This alternative component is thought to integrate environmental and water supply maximum flexibility. Although not shown on Figure 4, an additional intake could be constructed at Hood.

Figure 5 is an isolated facility with capacity limited in the range of 5,000 to 15,000 cfs. Figure 6 is the "chain-of-lakes" alternative component and it generated discussion because some in the group thought it had already been eliminated from further consideration. Stein noted that some lift stations are required in the alternative component because of low areas on some islands making it necessary to put in a pump to get the water to the next island and not just a siphon. Stein said three 18-foot diameter siphons would move 5,000 cfs. Some in the group wondered if it was really possible to move all that water by siphon all the way to Clifton Court but it was noted that the concept should work although it would be an expensive alternative component. As far as the alternative component being discarded, it was noted that in order for a programmatic EIR to go through a rigorous 404(b)1 process, one has to justify why a alternative component was discarded.

Figure 7 is the Sacramento Deep Water Ship Channel alternative component. Although expensive, it could possibly tie into the west side canal and would have less terrestrial impacts. There is concern about the alignment across Sherman Island where there is poorly consolidated sediments but it was thought the engineers could figure out how to do it.

The was discussion about whether all of the alternative components increase water supply and it was thought that they did. A discussion on the definition of "water supply reliability" ensued. Carriage water exists in the alternative components but is less now. One must look at the operational rules to see the water supply benefits. Stein asked if we had captured the range of alternative components. There was discussion about fish screens and it was noted they are shown on the figures.

The meeting was adjourned a little before 4 pm.